CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES
OF WILD FAUNA AND FLORA

Amendments to Appendices I and II of CITES

Twelfth Meeting of the Conference of the Parties
Santiago (Chile), November 3-15, 2002

A. PROPOSAL

Transfer of *Sclerocactus spinosior* spp. *blainei* from Appendix II to Appendix I.

B. PROPONENT

The United States of America.

3. SUPPORTING STATEMENT

1.1 Taxonomy

1.1 1 Class: Dicotyledoneae

1.2 Order: Caryophyllales

1.3 Family: Cactaceae

1.4 Species: *Sclerocactus spinosior* spp. *blainei* (Welsh & Thorne) Hochstätter 1995

1.5 Scientific synonyms: *Sclerocactus blainei* Welsh & Thorne 1985
Sclerocactus schlesseri Heil & Welsh 1986
Pediocactus spinosior spp. *blainei* (Welsh & Thorne) Halda 1998
Pediocactus spinosior spp. *schlesseri* (Heil & Welch) Halda 1998

1.6 Common names:
English: Blaine's pincushion, Blaine's fishhook cactus, Desert valley fishhook cactus, Great Basin eagle-claw cactus, Schlesser's pincushion, Spinier devil's-claw cactus

1.7 Code Numbers:

1.2 Biological Parameters

2.1 Distribution:

S. spinosior spp. b*lainei* is reported as occurring in Nye and Lincoln Counties, Nevada, and Iron County, Utah, United States of America (Anderson, 2001; Kartesz, 1999). The Utah Natural Heritage Program does not consider the taxon to be present in Utah (Franklin, pers. comm., 2002). Taxonomic uncertainty regarding this taxon confounds the issues related to its distribution. According to Dr. Morefield, Nevada Natural Heritage Program, "the descriptions and circumscriptions of *S. blainei*, *S. nyensis*, and *S. schlesseri* are highly

inconsistent within and among the recent treatments" (NatureServe, 2002). The treatment given in the CITES Cactaceae Checklist has been followed for the purposes of this proposal. In addition the taxon will be considered as occurring in Utah until the disagreement over distribution has been definitely resolved.

2.2 Habitat availability:

S. spinosior spp. *blainei* is found between 1460 and 1830 meters in elevation (NatureServe, 2002). It is found on alkaline calcareous and volcanic gravelly-clay soils in open valley bottom areas in the shadscale and lower sagebrush zones. Associated species include *Sarcobatus vermiculatus, Pleuraphis jamesii, Atriplex confertifolia, Artemisia tridentata,* and *Ericameria nauseosa* (Nevada Natural Heritage Program, 2001).

2.3 Population status:

S. spinosior spp. *blainei* is known from about ten locations in Nevada (Morefield, 2002). The total number of individuals is unknown. No information is available on the status of the species in Utah. *S. spinosior* spp. *blainei* is listed as Endangered by the IUCN (Walter and Gillett 1998).

S. spinosior spp. *blainei* is ranked as S1 and G1. The ranking of S1 and G1 are applied to taxa that have been identified as critically imperiled in the state (S1) and globally (G1). These taxa are at great risk of extirpation due to extreme rarity, imminent threats, and/or biological factors (NatureServe 2002). Furthermore, the taxon is listed as Special Status Sensitive Species on lands managed by the U.S. Bureau of Land Management (http://www.blm.gov/nhp/efoia/nv/98im/nvim98-013.htm).

2.4 Population trends:

Currently unknown. However, Dr. J. Lüthy of the Management Authority of Switzerland, reports that specimens of *S. spinosior* spp. *blainei* in the wild are rare and hard to find, based on personal observation (Lüthy, 1999).

2.5 Geographic trends:

Specific information about the geographic trends of *S. spinosior* spp. *blainei* is not available. However, potential habitat for *S. spinosior* spp. *blainei* in Nevada may be affected by agricultural and/or industrial development, off-road vehicle use, and highway maintenance (NatureServe, 2002).

2.6 Role of the species in its ecosystem:

S. spinosior spp. *blainei* usually occurs as solitary plants, 3-15 cm tall. Flowers are reddish purple to violet or lavender and are borne at the tops of the stems in the late spring (Nevada Natural Heritage Program, 2001).

An important aspect of cactus flowers is the presence of different syndromes or sets of characters facilitating pollination by bats, birds, or insects. Red flowers are frequent in regions where bird pollination is common (Anderson, 2001). Cactus fruits are a source of food for numerous animals, including many species of birds. The most common method of cactus fruit or seed dispersal is by birds (Anderson, 2001).

2.7 Threats:

S. spinosior spp. *blainei* is desirable and vulnerable to hobby collectors and poachers (Lüthy, 1999; Morefield, 2002). The seeds of *S. spinosior* spp. *blainei* have become increasingly available on several European web sites (Lüthy, 1999). The Nevada Natural Heritage Program receives requests from individuals in Europe for population location information for *S. spinosior* spp. *blainei* (Morefield, 2002). Most species in the genus have been adversely affected by illegal collection (Anderson, 2001).

3. Utilization and Trade

3.1 National utilization:

The seeds of *S. spinosior* spp. *blainei* are commercially available on the Internet.

3.2 Legal international trade:

The U.S. CITES Annual Report data show no exports of wild specimens of *S. spinosior* spp. *blainei* from 1994 to 2000 (U.S. Fish and Wildlife Service, 2002). Seeds from *S. spinosior* spp. *blainei* are available on the Internet from web sites located in the Austria, the Czech Republic, Germany, Malta, and the Netherlands.

3.3 Illegal trade:

There is no documentation of illegal international trade in wild-collected specimens from the United States of America.

3.4 Actual or potential trade impacts:

The potential trade impacts to *S. spinosior* spp. *blainei* include the over-harvest of wild plants and seeds. Because these are slow-growing plants from small populations, unregulated harvest of individual plants may affect the long-term survival of the taxon.

2.5 Captive breeding or artificial propagation for commercial purposes (outside country of origin):

Although *S. spinosior* spp. *blainei* is commercially available, the genus *Sclerocactus* is one of the most difficult to propagate (Anderson 2001).

4. Conservation and Management

4.1 Legal status:

4.1.1 National:

S. spinosior spp. *blainei* is listed on the State of Nevada Rare Species List, and also listed as a Special Status Sensitive Species by the U.S. Bureau of Land Management. The U.S. Lacey Act (described in 4.3.2.) provides protection against the illegal trade of *S. spinosior* spp. *blainei.*

International:

S. spinosior spp. *blainei* has been listed in CITES Appendix II since 1975.

4.2 Species management:

3.1.1 Population monitoring:

S. spinosior spp. *blainei* has not yet been systematically surveyed for in Nevada (Nevada Natural Heritage Program, 2001).

3.1.2 Habitat conservation:

S. spinosior spp. *blainei* occurs on land managed by the U.S. Bureau of Land Management (BLM) in Nevada, and is listed on the BLM State Director's Sensitive Species List (http://www.blm.gov/nhp/efoia/nv/98im/nvim98-013.htm).

4.2.3 Management measures:

According to BLM regulations, collection of "sensitive" plants may be permitted only for scientific or educational purposes, or conservation or propagation of the species, and must be authorized by a BLM permit (BLM Manual 6840.06C.) In addition, the State of Nevada regulates the harvest of *S. spinosior* spp. *blainei* (Nevada Natural Heritage Program, 2001).

4.3 Control measures:

4.3.1 International trade:

S. spinosior spp. *blainei* has been subject to the trade controls of CITES Appendix II since 1975. Thus, all exports of living or dead plants require the issuance of an export permit by the country of origin, and re-export require the issuance of re-export certificates by the country of re-export. However, seeds of *S. spinosior* spp. *blainei* are exempted from the listing in Appendix II by annotation.

3.2.2 Domestic measures:

S. spinosior spp. *blainei* is protected by the U.S. Lacey Act, which makes it unlawful to possess any wild plant (including roots, seeds, and other parts) that is indigenous to any State and which is either listed in an appendix to the Convention on International Trade in Endangered Species of Wild Fauna and Flora, or listed pursuant to any State law that provides for the conservation of species threatened with extinction. According to the Act, it is unlawful to import, export, transport, sell, receive, acquire, or purchase in interstate or foreign commerce any wild plant (including roots, seeds, and other parts) taken, possessed, transported, or sold in violation of any State law or regulation. It is also unlawful to import, export, transport, sell, receive, acquire, or purchase any wild plant (including roots, seeds, and other parts) taken or possessed in violation of any U.S. law, treaty, or regulation or in violation of Indian tribal law (http://www.xmission.com/-gastown/herpmed/lacey.htm).

The Nevada Natural Heritage Program protects location information in Nevada for *S.*

spinosior spp. *blainei* because the species is considered especially vulnerable to poaching, vandalism, harassment, and hobby collecting.

5. Information on Similar Species

Currently, taxonomic uncertainty regarding the treatment of *Sclerocactus blainei* exists. Some consider *Sclerocactus spinosior* (Engelmann) Woodruff & L. D. Benson to include *Sclerocactus blainei* S. L. Welsh & K. Thorne, *Sclerocactus spinosior* spp. *blainei* (S. L. Welsh & K. Thorne) Hochstätter, and *Sclerocactus schlesseri* K. D. Heil & S. L. Welsh (Anderson, 2001). Others treat *Sclerocactus blainei* and *Sclerocactus schlesseri* as separate species (e.g., Nevada Natural Heritage Program), or refer to *S. blainei* as a local variant of *S. spinosior* that differs in details of spination only (Hunt, 2002).

Sclerocactus blainei is considered an unusual *Sclerocactus*, because some specimens have long ribbon-like spines reminiscent of *S. papyracanthus*. The taxon *S. blainei* differs from other sclerocacti in the region in that the flowers are slightly larger and the upper central spine is longer than those of either *S. pubispinus* or *S. spinosior*. However, a few documented specimens of *S. blainei* are reported to be similar in appearance to *S. pubispinus* and *S. spinosior*. The central spine number varies, and the number of hooked spines may number as many as six, which is characteristic of *S. polyancistrus spinosior* (Porter, 2002).

A few documented specimens of *S. nyensis* have been reported to be similar in appearance to *S. blainei, S. pubispinus*, and *S. spinosior* (Porter, 2002).

6. Other Comments

7. Additional Remarks

8. References

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